











Contents

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1. Intended Use

The sewing machine is intended ...

- for use as a movable machine,
- for sewing normal household fabrics
- for private use only.

The sewing machine is **not intended** ...

- to be installed at a fixed location,
- for processing other materials (for example leather, canvas, and similar heavy materials)
- for use in commercial or industrial applications.

2. Technical Data

Power supply:	230 V / ~50 Hz
Power consumption:	85 W max
Motor output:	70 W
Bulb rating:	15 W
Bulb voltage:	230 V / ~50 Hz
Bulb thread:	E14 thread
Protection class:	II
Dimensions:	160 x 380 x
	315 mm
Weight::	6 kg approx.

3. Content of package

(see foldout page)

- 1 sewing machine
- 1 foot switch
- 3 bobbins
- 2 felt wheels
- 1 zigzag foot (attached)
- 1 buttonhole foot
- A 1 blind hem foot
- **1** button foot
- 4 1 zipper foot
- B 1 seam guide
- 1 darning plate
- (h 1 knife
- 1 sew foot
- 1 set of needles
- 1 oil tube
- 2 screwdrivers
- Operating instructions

Keep this manual for future reference and pass it on with the equipment to any future users.



4. Notes on safety

Like any other electrical device, a sewing machine can cause serious, even life-threatening injuries. To avoid this, and in order to work safely:

- Always pull out the power plug when you are not at the machine.
 This will prevent the risk of accidents if the machine is switched on accidentally.
- Pull out the power plug before replacing the bulb, or when carrying out maintenance work on the machine.

This will prevent possibly life-threatening electric shocks.

- Only use the sewing machine in dry rooms.
- If damage is visible on the sewing machine, or the foot switch, or the power cord: Have the damage repaired by Customer Service, before using the sewing machine again.
- Do not allow children or elderly persons to handle the machine unsupervised – these are not always able to recognize potential dangers. Keep electrically powered tools out of the reach of children.

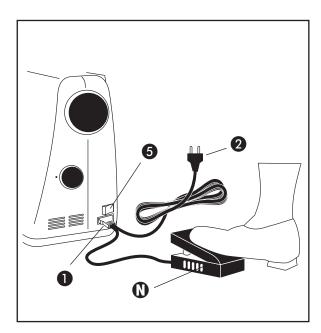
Warning!
Possible injury and material damage:

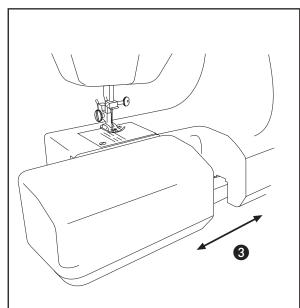
As a user of electrical appliances, you are legally required to prevent possible accidents by taking the appropriate safety measures:

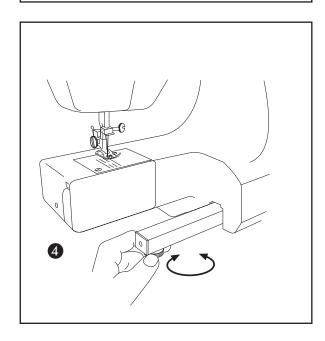
- Keep your work space tidy. An untidy workplace can lead to accidents.
- Provide adequate lighting when working!
- Do not wear loose clothing or jewellery, as these can be caught in the moving parts. For the same reason, you should also wear a hair net if you have long hair.
- Avoid adopting any unusual posture. Remain steady and in a wellbalanced position at all times.
- Be alert! Pay attention to what you are doing. Always take a rational approach to your work. Never work with the sewing machine if you are unable to concentrate or if you are feeling unwell!

If accidents occur as a result of handling the machine with insufficient care, or failure to follow the safety instructions in this manual, then the manufacturer cannot accept liability.









5. Setting up

- Place the sewing machine on a steady worktop.
- ① Connect the foot switch ♥ to the machine
- 2 Insert the **power plug** in a power socket.

If the worktop is **not completely even**, you can compensate for slight unevenness as follows:

- 3 Pull out the **box compartment** to the side, as shown.
- The adjusting foot should now be visible underneath. This can be adjusted by turning in either direction, to ensure that the sewing machine is steady.

The box compartment can now be simply pushed back – for example if you need it as an 'extension flap' for sewing larger areas of material.

However, you can also leave the compartment box detached, for example for free-arm sewing on sleeves, trouser legs, etc.

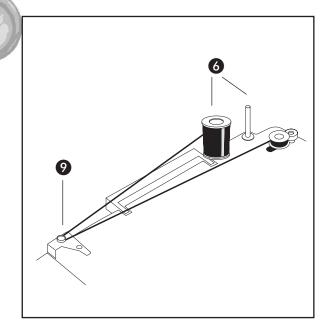
6. Switching On / Off

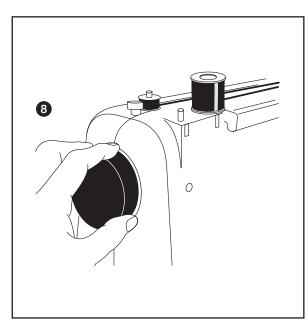
You should familiarize yourself with these methods of switching on and off, so that you can take the correct action in the event of an emergency:

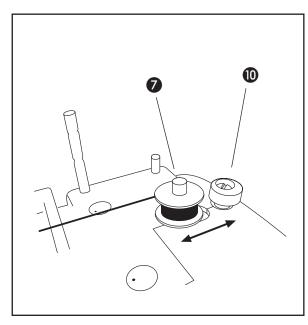
- **5** The lamp can be turned on and off by using the **switch**.
- 1 Pulling out the **foot switch plug** cuts off power to the machine.
- Pulling out the power plug from the power socket cuts off power to both the machine and the foot switch.











7. Threading

⚠ Warning!:

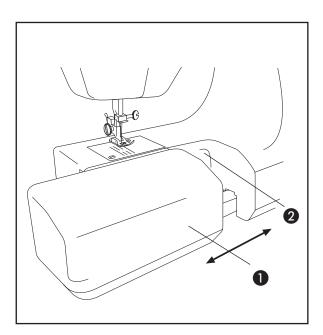
Before threading, make sure that the sewing machine is switched off, or that the power plug has been pulled out of the power socket, as accidents may be caused if the machine is started unintentionally.

a) Threading the lower bobbin

To fill the lower bobbin with thread:

- 6 Pull out one of the two **roll pins** and put on a spool of thread.
- You can put a **felt pad** under the spool of thread, to protect the machine casing.
- Place an empty bobbin on the winder spindle and wind the loose end of the thread on, giving several turns anticlockwise.
- 8 Pull out the **handwheel** slightly, to disengage the sewing mechanism from the motor.
- 9 Pull the thread through the thread guide for the winder tension.
- After the first few turns of thread are taut on the bobbin, press the bobbin against the winder stopper.
- Now switch on the sewing machine and step on the foot switch. When the bobbin is full, cut the thread.
- Press the winder spindle forward again and take out the full bobbin.
- 8 Do not forget to press the handwheel back in, otherwise the sewing mechanism remains disengaged from the motor.



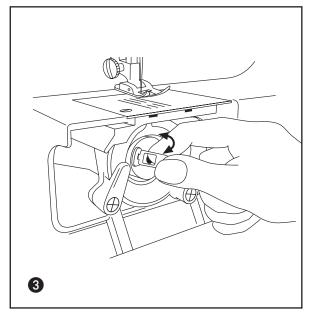




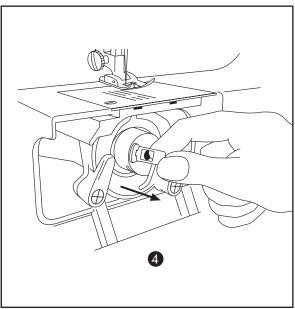
First raise the needle fully, by turning the handwheel.



- 1 Pull out the **box compartment** to the side, as shown.
- 2 Open the gripper flap located behind.



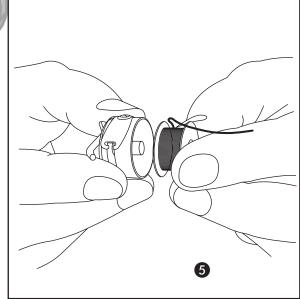
3 Fold out the **lever arm** from the bobbin case.



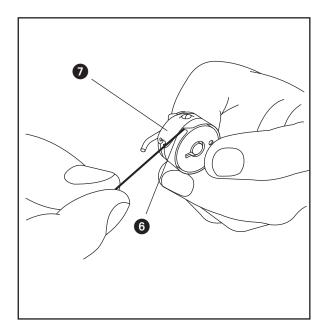
4 Take out the **bobbin case** as shown.



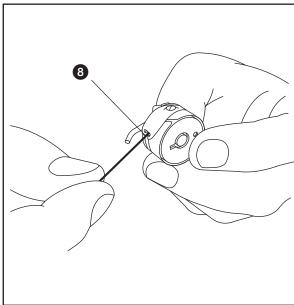




5 Wind about 10 cm of thread away from the bobbin and feed this into the bobbin case.



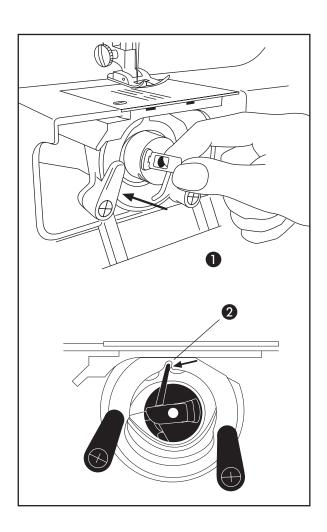
- 6 Pull the loose end of the thread through the **gap** in the side of the bobbin case
- 7 under the tension spring



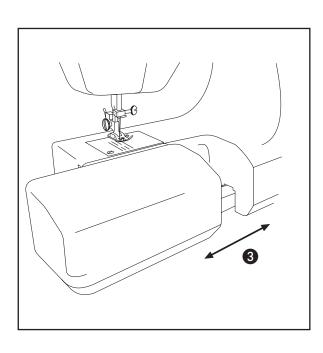
3 until the thread passes out of the **slit** in the bobbin case.







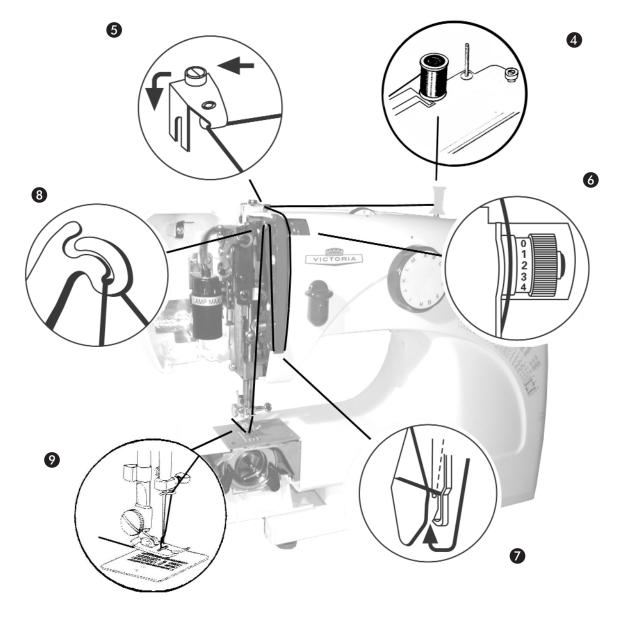
- Place the bobbin case on the pin
- 2 Turn the bobbin case until the **feed** dog engages in the recess.
- Place the excess thread so that it does not catch anywhere
- Close the gripper flap.



3 The box compartment can now be simply pushed back in, for example if you need it as an 'extension flap' for sewing larger areas of material. However, you can also leave the box detached, for example forfree-arm sewing on sleeves, trouser legs, etc.







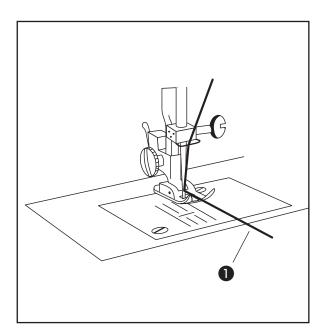
c) Threading the upper thread

To pass in the upper thread, it is **not** necessary to open the front of the sewing machine. The illustration is for guidance only.

- 4 Pull out one of the two roll pins and put on a spool of thread.
- You can put a **felt pad** under the spool of thread, to protect the machine casing.
- Pass the thread through the upper thread guide,

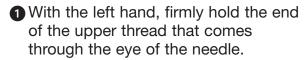
- 6 then over the thumbwheel for the upper thread tension,
- then under the tension spring,
- 8 then over the threading hook,
- 9 then through the thread guide to the needle, through the needle eye and finally under the back of the sew foot.



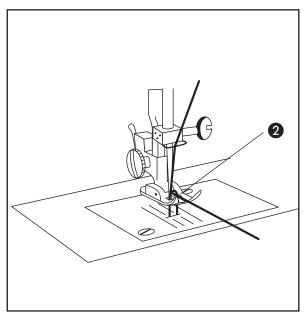


d) Retrieving the lower thread

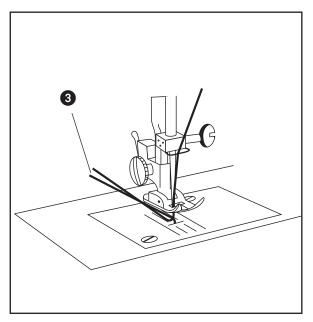
First raise the needle fully by turning the handwheel.



 With the right hand, give the wheel one complete turn anticlockwise.

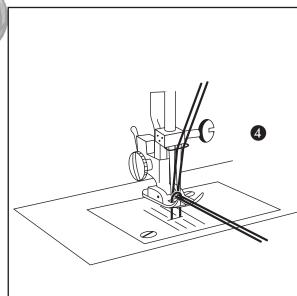


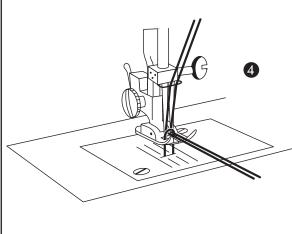
- 2 The upper thread now pulls the lower thread into a loop.
- As soon as the lower thread appears, carefully pull the upper thread you are holding in your left hand. In this way, you can pull the lower thread clear.



- Pull out the two threads by about 10 cm.
- 3 and lie them out as shown. The sewing machine is now ready to use.







Threading with 2 needles

If you have inserted the twin needle, as described in Chapter 8:

- Pull out both roll pins and put on two spools of thread.
- 1 You can put a felt pad under the spool of thread, to protect the machine casing.
- Pass the two upper threads through, just as you would for a single thread,
- 4 until the threads are at the needle: but in this case, thread the two ends of the upper threads separately through the two needle eyes.
- The lower thread is also passed through and collected in the same way as for the single thread.

8. **Attaching accessories**

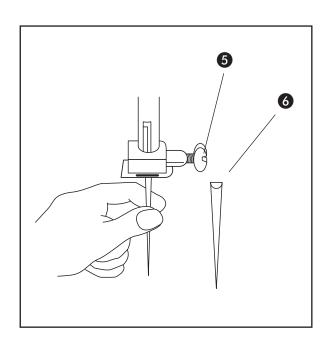
Warning!:

First pull the power plug out of the power socket! This will prevent the machine from being started unintentionally while you are working.

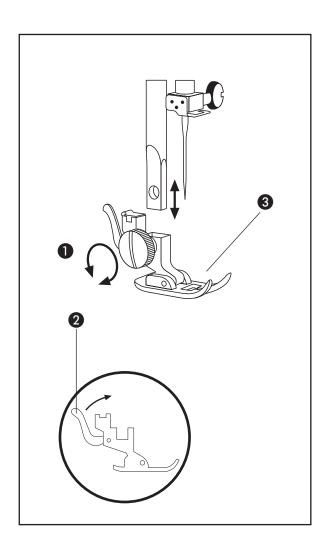
Changing needles a)

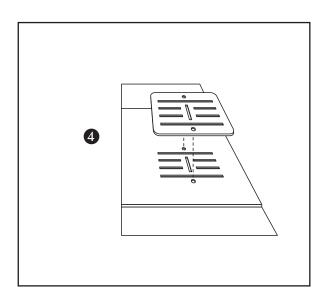
First raise the needle fully, by turning the handwheel.

- **5** Loosen the **clamping screw** and take out the old needle.
- 6 Insert the new needle, with the flat end towards the rear. Insert it up to the top
- **5** and turn the **clamping screw** to lock it in place.









b) Changing the sew foot

First raise the needle fully, by turning the handwheel.

- 1 Loosen the foot screw and take off the sew foot together with the foot holder.
- 2 Press the lever on the foot holder. The sew foot can now be separated from the holder.
- 3 Place the selected sew foot on the holder, for example the
- buttonhole foot
- **A** blind hem foot
- (3) button foot
- @ zipper foot
- 2 and press the lever again till the sew foot engages in the holder.
- Place the sew foot and holder back on the guide rod and tighten the foot screw again.

c) Changing the stitch plate

The zigzag stitch plate is mounted on the machine at the factory, and can be used for most straight stitches, zigzag stitch work, and decorative stitches. However, if you wish to use the darning plate supplied:

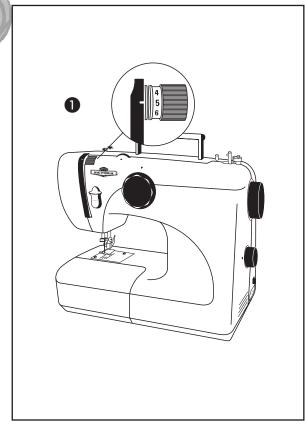
First raise the needle fully, by turning the handwheel.

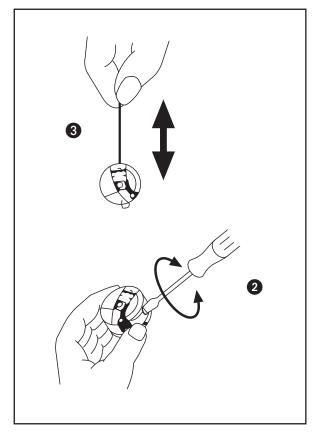
- Simply lay the darning plate on top of the zigzag plate, so that the flat guide pins are inserted in the slots in the zigzag plate.
- If you no longer need the darning plate, simply take it off again.











9. Settings

The tension in the upper and lower thread has been set **correctly** if no twining of the thread is visible on the top or on the underside of the material after sewing.

If the tension on only one of the threads is set **incorrectly**, the resulting seam will be untidy. The stitches lie flat on the material, seams are not formed and the material is not drawn through.

a) Setting the upper thread tension

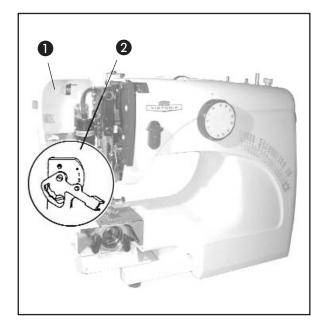
- 1 You can use the thumbwheel for the upper thread tension to set the tightness of the upper thread. If this thread is ...
 - too tight (higher setting), then the upper thread is loose and the material is being 'sewed' with the lower thread only.
 - too loose (lower setting), then the lower thread is loose and the material is being 'sewed' with the upper thread only.

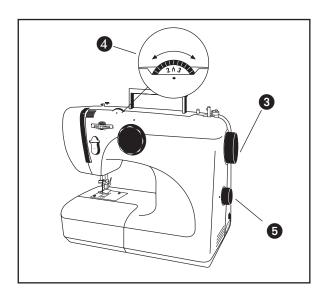
The upper thread tension is normally set between 4 and 6.

b) Setting the lower thread tension

- 2 You can turn the screw on the bobbin case to set the tightness of the lower thread. Turn it ...
 - clockwise to increase the tension.
 - anticlockwise to reduce the tension.
- The lower thread tension has been set correctly if the bobbin case unwinds slowly and evenly ("Drop test").







c) Setting the presser foot pressure

Here you can set the pressure with which the material is pressed onto the stitch plate.

- Using the little screwdriver supplied, loosen the screw at the top of the front cover.
- 1 Open the front cover.
- 2 Now use the lever to set the presser foot pressure, for example
 - "0" if no pressure is to be applied, for example for darning with freehand stitches
 - "1" for light fabrics (curtains)
 - "2" for average fabrics (normal)
 - "3" for heavy fabrics.

d) Stitch width

Here you can set the width of seam for zigzag patterns.

- 3 First raise the needle fully, by turning the handwheel.
- Select a stitch width from 0...5 using the selector wheel (0 = narrow / 5 = wide)

Important: If the **twin needle** has been inserted, the selector wheel should be set to "3" maximum. If a higher setting is selected, the twin needle will break!

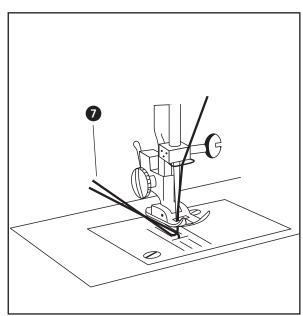
e) Stitch length

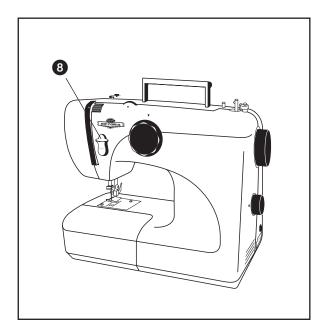
Here you can set the speed at which the material is carried forward when sewing. This therefore determines the gap (length) between the stitch points.

Select a stitch length on the stitch length selector wheel (0 = short / 4 = long).









10. Sewing

If you have placed the thread and everything is set correctly, as described in the previous chapters:

a) To place the material

- 3 Raise the needle fully, by turning the handwheel.
- 6 Raise the sew foot using the foot pedal.
- Place the material under the sew foot and lower the sew foot again.

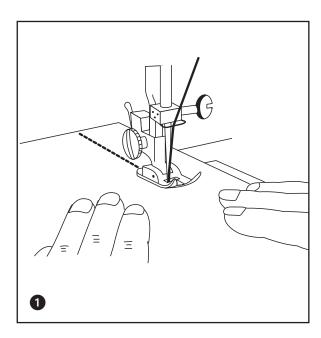
b) To start a seam

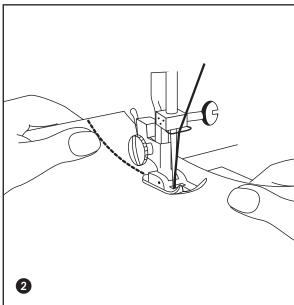
- With the left hand, firmly hold the two ends of the threads laid out towards the rear.
- Now press very carefully on the foot switch – just enough to complete the first 3 or 4 stitches. While doing this, guide the material with the right hand.
- 8 When the first stitches have been successfully completed, briefly press and hold the the reverse lever ...
- and, in the same way, step on the foot switch – until you have returned to the starting point. When you now want to continue with the seam from that point, it is held firmly by several overstitches.

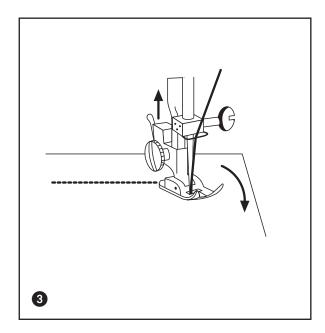
c) To finish off a seam

Sew back and forth at the end of the seam using the reverse lever, as at the start of the seam. The end of the seam is now also held firmly.

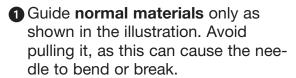








d) Guiding the material



- Very fine materials are drawn in slightly when sewing. To prevent this, simply lay a thin sheet of paper under the material and sew with the paper in place. When you have finished sewing, carefully pull the paper away from the material; the result is a very clean stitch.
- With stretch fabrics it may be necessary to guide the material towards and away from the sew foot, to prevent the fabric from being drawn in.

e) Changing the sewing direction

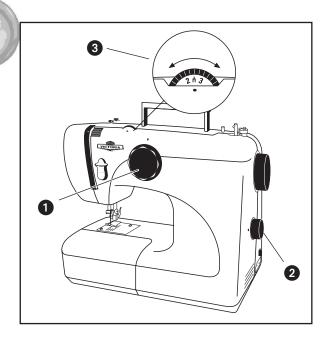
You have arrived at a certain point, and you now want to continue sewing in a different direction ..

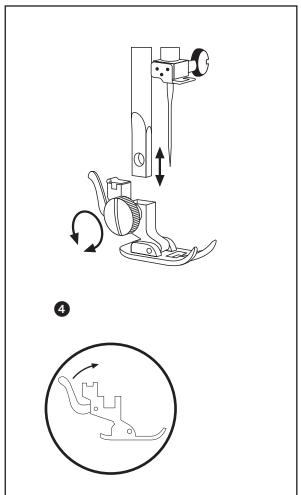
- You can do this very easily by stopping at the desired point and leaving the needle in the material.
- Raise the sew foot using the foot pedal.
- Turn the material around the needle in the desired direction
- Lower the **sew foot**.

You can now continue sewing in the usual way in the new direction.









f) Selecting a stitch pattern

To select a particular pattern, take the following steps:

- Select Stitch program on the programme selector.
- 2 Set the stitch length.
- 3 Select the stitch width.
- 4 Attach the corresponding **sew foot**, as described in Chapter 8.

Make the required settings as shown in the **table on the right**. If two values are set for the stitch length, these are understood as "from ... to ..." values.

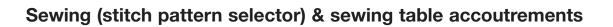
g) Straight stitch

This is the most frequently used type of stitch. The zigzag sew foot is used for both straight and zigzag stitches. A smaller size of stitch should be selected for sewing finer materials.

h) Zigzag

The zigzag stitch is universal. The satin stitch pattern consists of short stitches set closely to each other, and is suitable for sewing initials, figures, appliqué, etc..

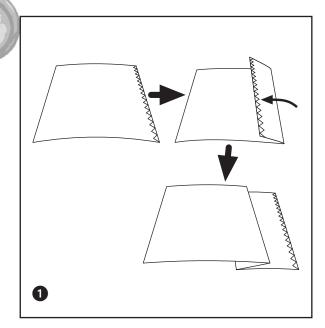


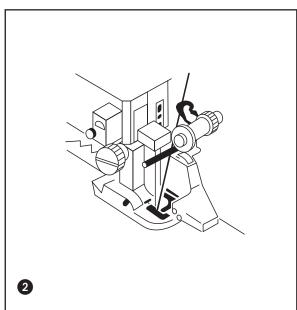


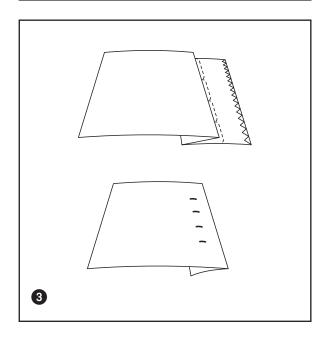


	Stitch pattern		Stitch length	Sew foot	Stitch width	
Α	Straight stitch	 	0 4		0	
	Zigzag	**************************************	• 0 4		0-5	
b	Blind hem	>	• 1 4		3-5	
С	Box stitch	\\	• 1 3		5	
d	Three-step zigzag stitch	\sim	• 0,5			
е	Blind stitch	~	• 1 3		3-5	
F-H	Buttonhole		0,25		5	
i	Single overlock stitch					
j	Honeycomb stitch	\bigotimes			5	
k	Slant over edge stitch				3	
L	Stretch zigzag stitch	>	4			
	Stretch straight stitch	111 111 111			0	
М	Double overlock stitch				5	
	Free-hand embroidery		• 0 ←	None	0-5	









i) Blind hem

- 1 Fold the material as shown. Make the fold as wide as you want the finished seam to be: the bottom fold should be about 5 mm away.
- 2 Use the **blind hem foot**. While sewing, check the seam width and needle setting, to ensure that the seam remains uniform.
- 3 Sew the blind seam on the underside of the material, so that only the peak of the zigzag stitch pierces the outside of the material. When you have finished sewing, push the left of the material over to the right and smooth out. The seam is almost invisible!

The **table** below shows the suggested settings for the various values, depending on the material used.



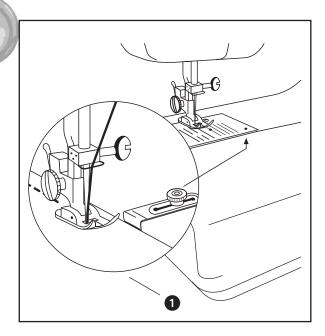


Please refer to the details for the various materials.



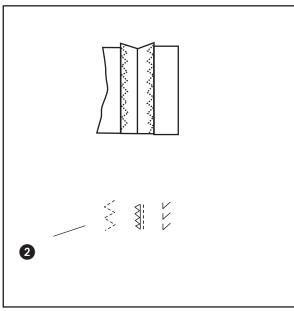
	Material	Thread	Needle	Presser foot pressure	Stitch	length	Upper thread tension	
				See P. 19	straight stitch Stitch selecti	length on	3 4 5	
Light	Nylon Tricot	Cotton 80 Man-made	70					
	Silk	fibre 60 Silk 50	(10)			1-3	1-4	
	Wool Silk	Man-made fibre 50 Silk	80 (12)					
Medium	Poplin	Cotton 60-80	80-90 (12-14) 80 (12)					
1	Fine jersey	Man-made fibre 60			0.5-3	0.5-4	3 4 5	
	Gabardine	Silk 50						
Heavy	Denim	Cotton 50	90-100 (14-16)					
	Jersey	Man-made fibre 50	80-90 (12-14)		0.5-3	0.5-4	5 6 7	
	Tweed	Silk 50	80-90 (12-14)					





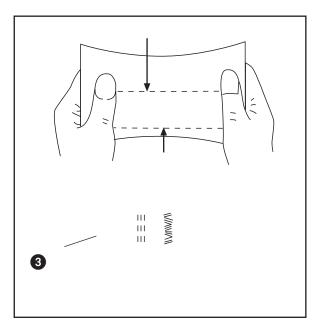


- 1 Use the seam guide for sewing longer seams or hems, which should have a uniform distance from the edge of the cloth.
- Screw the seam guide into one of the threaded holes on the right of the stitch plate. Set the desired seam width, then tighten the knurled screw.
- The edge of the cloth must touch the seam guide while sewing. The seam guide can also be screwed in obliquely for sewing corners.



k) Overcast stitch

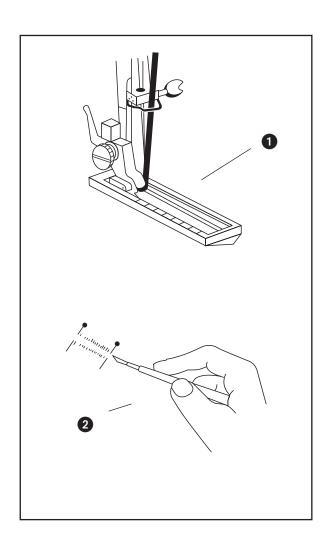
2 Select this stitch when you want to prevent fraying on cut edges.



I) Stretch seam

3 Select this stitch for cord, tricot and other stretch fabrics. This type of seam can be stretched without the thread breaking. The stretch seam stitch produces a highly strain-resistant, straight seam.



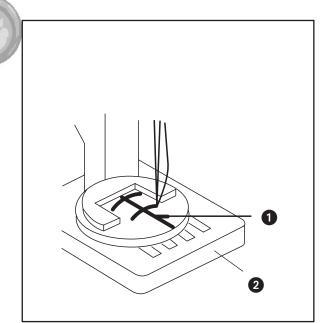


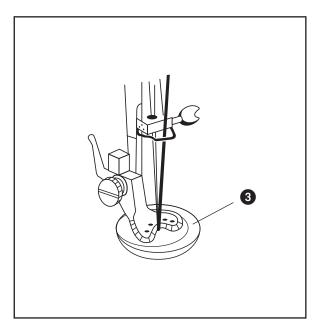


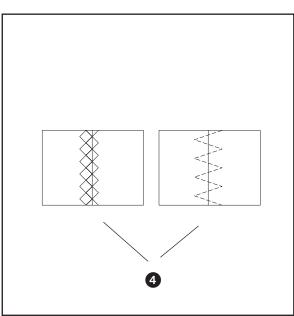
- 1 Attach the **button hole foot,** as described in Chapter 8.
- Refer to the table for:
 - the required stitch length
 - the required stitch pattern
 - the required **procedure** for sewing.
- 2 You can now cut into the center of the button hole, as shown.

Pattern selector (stitch pattern)		Procedure	Settings/Stitch length
н		шинин	Set selector to "1" Sew left side Raise needle
G		Mwwww	4. Set selector to "2" 5. Sew 5-6 stitches 6. Raise needle
F			7. Set selector to "3" 8. Sew right side 9. Raise needle
G			10. Set selector to "4" 11. Sew 5-6 stitches 12. Raise needle









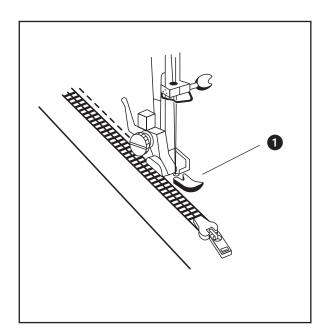
n) Sewing on buttons

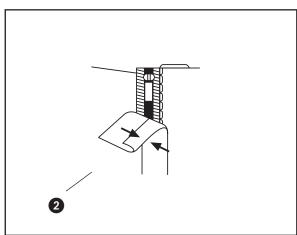
- 1 Attach the button foot
- 2 Place the darning plate on top of the zigzag plate, as described in Chapter 8.
- 3 Place the **button** between the button foot and the cloth, and lower the button foot.
- Turn the flywheel anticlockwise by hand. Check whether the needle passes cleanly through both button holes.
- If necessary, slightly adjust the stitch width of the zigzag pattern.
- If the sewing machine can sew both buttonholes in manual mode, you can now carefully sew 5-7 stitches with the machine by carefully pressing the foot switch.

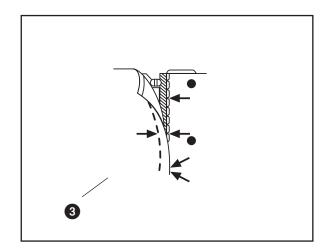
o) "Edge-to-edge" stitching

4 Select the "Three-step zigzag stitch" ("D") or the honeycomb stitch ("J") as stitch pattern.







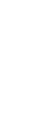


p) Sewing a zipper

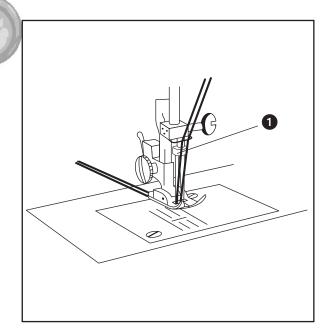
Using the zipper foot, you can sew closely along the edges of the zipper, without damaging either the zipper or the needle.

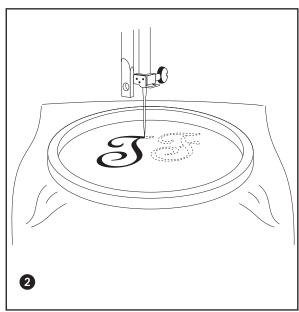
The zipper foot is also useful for sewing edges or parallel seams.

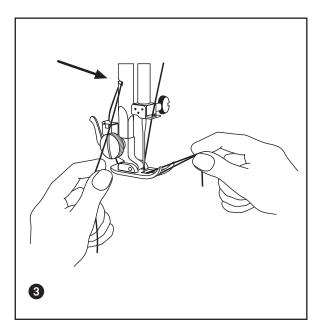
- 1 Attach the **zipper foot**, as described in Chapter 8.
- For the stitch pattern, select the straight stitch.
- 2 Fold over about 2 cm of cloth and place the zipper under the fold so that the edges of the zip only just stand out. It might be helpful to stitch in the zipper first.
- **3** Sew as closely as possible along the edges of the zipper.
 - To sew the **left side** of the zipper, the zipper foot must be placed to the left of the needle.
 - To sew the **right side** of the zipper, the zipper foot must be placed to the right of the needle.











q) Sewing with the twin needle

- 1 Insert the new needle, with the flat end towards the rear.
- Pass the thread in, as for normal sewing. The two threads are passed together through the thread guides – as far as the twin needle.
- It is here that the two upper threads are threaded **separately**.
- Make sure that the stitch width setting is no larger than "3" – otherwise the needle will break.

r) Embroidery

• Take off the sew foot

Place the **darning plate** on top of the zigzag plate, as described in Chapter 8.

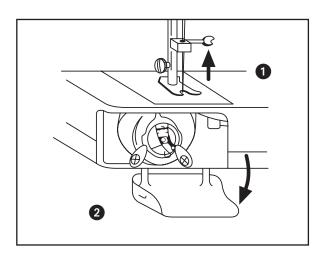
2 Embroidery can only be done freehand. The material should be clamped in the tambour and moved around the motif as required, while you control the speed of the needle movements with the foot switch.

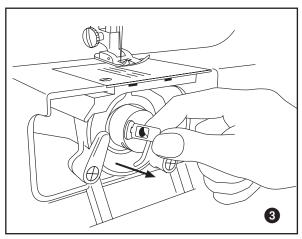
s) Thread cutter

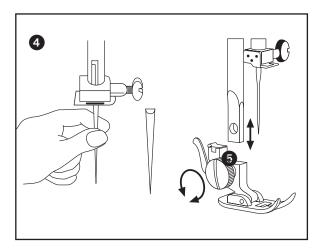
When you have completed a seam, or if you wish to cut the threads for any other reason:

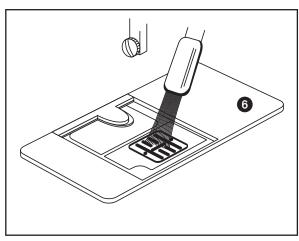
3 Simply pull the threads over the sharp **blade** behind the sew foot to cut the threads off.











11. Care

After each use, remove any pieces of thread, material, and fluff. Only in this way will you ensure that the sewing machine continues to work correctly and lasts for a long time.

⚠ Warning!:

Before carrying out any maintenance work on the sewing machine, first pull the plug out of the power socket. This will prevent the risk of accidents due to the machine being started unintentionally.

a) Clean the gripper area

⚠ Important!

Never disassemble any of the mechanical parts at the gripper. Extensive experience with mechanical devices is required in order to reassemble these.

Only Customer Service has the special equipment necessary for disassembling the gripper mechanisms. It should be enough for the user just to clean this area with a brush or vacuum cleaner.

- 1 First raise the needle fully, by turning the handwheel.
- 2 Open the gripper cover
- 3 Take out the bobbin.
- Clean away all dirt with a brush or a vacuum cleaner (fitted with a brush attachment).

b) Clean the feeder

- 4 Take out the needle.
- 5 Take out the **sew foot,** as described in Chapter 8.
- 6 Remove the screws from the **stitch plate** and take out the stitch plate. You can now clean the **feeder**.





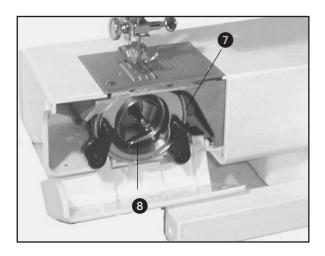


c) Clean the casing

⚠ Danger!:

Never open any parts of the machine casing other than those described in this manual. There are no operating elements inside. Otherwise there is a risk of **injury and potentially life-threatening accidents**.

- Clean all the plastic surfaces with a soft dry cloth.
- Do not use cleaning agents or abrasive materials, which can scratch the casing.
- Do not, in any circumstances, immerse any machine components in water or other fluids! This can damage the components



d) Oil the gripper track

⚠ Important!

Apply the oil very sparingly. Excessive oil on the working parts can soil the thread, and your fabrics.

- Allow 2 or 3 drops of oil to drip into the narrow slit between the gripper and the gripper track.
- Then give the gripper several complete turns by hand. This will distribute the oil.

Just a little oil applied in this way, once or twice per year, is sufficient. The main purpose is to prevent rust from forming, if the machine is left unused for long periods.

e) What else needs oiling?

Nothing - no other working parts require lubrication. You should not lubricate anything unless it is necessary, as oiled parts attract dust and may then become stuck.

f) Storing

Keep the sewing machine ...

- in a **dry place**, to protect the metal components from rust,
- inside the wrapping supplied, to prevent dust from penetrating into the sewing machine,
- out of the reach of young children or elderly persons, so that they are not exposed to risk if handling the machine unsupervised.



12. Is there a problem?

If something is not working, you can use the table below to try and correct the fault. If you are unable to remedy the fault by yourself, please contact Customer Service.

⚠ Warning!:

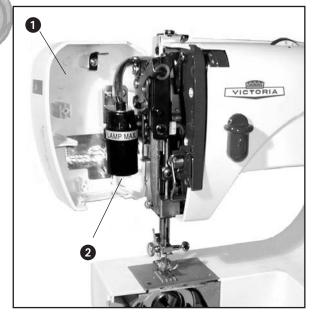
Before carrying out any maintenance work on the sewing machine, first pull the plug out of the power socket. This will prevent the risk of accidents due to the machine being started unintentionally.

Fault / Problem:	Check:	Possible remedy:	
Material is not moved through	Machine does not sew – Only the handwheel turns?	Press handwheel in!	
	Stitch length wheel set to "0"?	Set it at a value from "1" to "4".	
	Presser pressure too weak?	Set the pressure lever higher.	
Needle breaks	Needle set incorrectly?	Set flat end towards the rear!	
	Needle is bent?	Insert a new needle.	
	Are the needle + thread + material as in the Table in Chapter 10?	Select the correct needle for the thread and material.	
The upper thread breaks	Was it threaded correctly?	It's best to re-thread from the beginning!	
	Zigzag setting too wide?	Try a smaller width.	
	Upper thread too taut?	Select the middle setting.	
	Scoring / scratches on the gripper?	Replace the gripper.	
Lower thread breaks	Lower thread too taut?	Reduce the thread tension.	
	Needle set incorrectly?	Set flat end towards the rear!	
	Was it threaded correctly?	It's best to re-thread from the beginning!	
	Dust and fluff in the gripper?	Clean the gripper area	
Ripples in the material	Thread tension too high?	Reduce the tension!	
	Foot pressure too high?	Reduce the foot pressure!	
	Are the needle + thread + material as in the Table in Chapter 10?	Select the correct needle for the thread and material.	









If the bulb no longer comes on...

If the bulb is burned out, replace it with a bulb of the same type, available from a specialised dealer. The bulb specification is "15W - E14".

- Using the little screwdriver supplied, loosen the screw at the top of the front cover.
- 1 Open the front cover.
- 2 Unscrew the faulty bulb and insert a new one in the **socket.**

13. Warranty and service

The warranty conditions and service address can be found in the enclosed warranty slip.

14. Disposal

Keep the sewing machine's transport packaging. This can be useful for storing the sewing machine – but it will be especially useful if you need to return the sewing machine for repair. Most instances of damage occur when the machines are being transported.

Tip: Protect the environment! If you want to dispose of this machine, take it to a recycling point for electronic goods.